



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/647,930	10/16/2000	Katsunori Tamura	P10718300003	6945

7590 03/06/2003

Arent Fox Kintner Plotkin & Kahn
Suite 600
1050 Connecticut Avenue
Washington, DC 20036-5339

EXAMINER

MANOHARAN, VIRGINIA

ART UNIT	PAPER NUMBER
----------	--------------

1764

DATE MAILED: 03/06/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/647,930

Applicant(s)

TAMURA ET AL.

Examiner

Virginia Manoharan

Art Unit

1764

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 October 2002.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-21 is/are pending in the application.
- 4a) Of the above claim(s) 20 and 21 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-19 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 3.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Applicant's election without traverse of group I, claims 1-19 in Paper No. 6 is acknowledged.

The abstract of the disclosure is objected to because of the inclusion of legal phraseology often used in patent claims. For example "means for" at lines 7-9 from the bottom. Correction is required. See MPEP § 608.01(b).

The specification has not been checked to the extent necessary to determine the presence of all possible minor errors e.g. typographical, grammar, idiomatic, syntax and etc. Applicants' cooperations are requested in correcting any errors of which applicants may become aware in the specification.

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "22" in page 19, line 12 and "23" in page 19, line 13 have both been used to designate "partition". The same holds true for "partition 24" in page 19, line 15. A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

Applicants should further check that no same numbers should refer to different parts and vice versa i.e., different numbers referring to the same part.

Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1764

- a. The term "characterized" is not a recitation of positive, structural elements of an apparatus. See e.g., claims 1, 9, 14.
- b. Claims 1-19 are rejected under 35 U.S.C. 112, second paragraph, as being incomplete for omitting essential elements, such omission amounting to a gap between the elements. See MPEP § 2172.01. The omitted elements are: the connections e.g. of the first, second and third distillation sections relative to the first and second chambers and the connections of the three discharge means relative to the other structures.
- c. The claims should be amended so that the "enriching section" and "exhaust section" in claim 1, (d), for example only, is recited as the- first enriching section-and- first exhaust section.- respectively in order to avoid confusion in the claims. There are other enriching sections and exhaust sections recited in the same claim. The terms second, third and etc., should be used whenever necessary.
- d. In claim 3, line 2, it is unclear whether the feed nozzle do in fact feeds the material liquid into the first distillation section with the recitation of "is adapted to".

Deleting this phrase and replacing the feed to feeds obviates this rejection.

See also claims 14-18.

- e. The addition of the word "type" such as in "channel-type distributor" in claim 14 and "an open static-pressure-type tubular distributor" in claims 15-18 renders an otherwise definite expressions indefinite as it extends the scope of the expression. Ex parte Copenhaver, 109 USPTO 118 (Bd. App.1955).

The same holds true for the phrase "assuming a form" in claim 19.

Art Unit: 1764

- f. The claims or at least part of the claims do not recite positive, structural elements of apparatus, which makes the actual structure vague and indefinite. Note for examples sections (j) and (k) of claim 9. Section (j) e.g. should positively recite a distributor.
- h. Note typographical error in claim 12, line 3 for "thoretical".

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-19 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims e.g., 5 and 12 of copending Application No. 09/813,022. Although the conflicting claims are not identical, they are not patentably distinct from each other because the subject matter of the instant claims are covered in the above copending application and vice versa.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Claims 1-19 are provisionally rejected under the judicially created doctrine of double patenting over claims e.g. 5 and 12 of copending Application No. 09/813,022.

Art Unit: 1764

This is a provisional double patenting rejection since the conflicting claims have not yet been patented.

The subject matter claimed in the instant application is fully disclosed in the referenced copending application and would be covered by any patent granted on that copending application since the referenced copending application and the instant application are claiming common subject matter, as follows: a distillation apparatus comprising:

a column body; a partition for dividing the interior of said column body into a first chamber and a second chamber, which are adjacent to each other; a first distillation section having an enriching section, to which an adjusted material liquid comprising a material liquid and an additive component is fed through a feed nozzle and which is formed above the feed nozzle; and an exhaust section formed under the feed nozzle; a second distillation section having an enriching section connected to and formed above an upper end of said first distillation section; and an exhaust section formed below the upper end and located adjacent to the enriching section of said first distillation section while being separated from the same by said partition; a third distillation section having an enriching section connected to and formed above a lower end of said first distillation and the discharge means.

Furthermore, there is no apparent reason why applicant would be prevented from presenting claims corresponding to those of the instant application in the other copending application. See *In re Schneller*, 397 F.2d 350, 158 USPQ 210 (CCPA 1968). See also MPEP § 804.

Art Unit: 1764

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 14-15 and 18 are rejected under 35 U.S.C. 103(a) as being unpatentable over Giroux (4,230,533) in view of Meili (5,964,986) or Meszaros (5,935,388).

Giroux discloses "a distillation apparatus comprising:
a column (2); a partition (5) for dividing the interior of said column body into a plurality of chambers, which are adjacent to one another; a collector (22) disposed within said column body and adapted to collect liquid descending from above." as claimed in claim 14. See also claims 15 and 18.

The apparatus of Giroux differs from the claimed invention in that claim 14 recites in section (d) a "... channel-type distributor for distributing liquid collected by said collector, among the chambers..." and an "... open static-pressure-type tubular distributor for distributing liquid collected by said collector, among the chambers..." recited in section (d) of claim 15; and further a collector box for forming a liquid collection gutter along an inner wall of each of said column body and said partition; and a plurality of collector laminas disposed on said collector box as claimed in sections (c) and (d) of claim 18.

However, it would have been obvious to incorporate into the apparatus of Giroux said distributor as such is conventionally done in the art as taught e.g., by Meili

Art Unit: 1764

showing a collector (204) and distributor (205) for the concentrated liquid at the bottom of the column, as well as distributor (206) in Figures 1 and 2.

Meszaros discloses basically similar elements as above and further discloses at col.2 lines 22-36 a collector 6 (lamella 201).

The "wherein clause "in claim 18 do not define any device of an apparatus and accordingly cannot be distinguished from the prior art in the structural sense.

Claim 19 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 1-13 and 16-17 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Gantt et al discloses a liquid collection surge zone.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to V. Manoharan whose telephone number is (703) 308-3844. The examiner can normally be reached on Tuesday–Friday from 7:30 a.m. to 6:00 p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (703) 308-6824. The fax phone numbers for the organization where this application or proceeding is assigned are 872-9310.


Application/Control Number: 09/647,930

Page 8

Art Unit: 1764

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0651.

Manoharan/tgd
March 5, 2003


VIRGINIA MANOHARAN
PRIMARY EXAMINER
ART UNIT ~~123~~ 764
3/5/03